DOCUMENT RESUME

ED 478 146 CE 085 104

AUTHOR	Foreman, David; Davis, Paul; Bone, John
TITLE	Assessment Practices at Diploma and Advanced Diploma Levels Within Training Packages.
INSTITUTION	National Centre for Vocational Education Research, Leabrook (Australia).
ISBN	ISBN-1-74096-090-4
PUB DATE	2003-05-00
NOTE	64p.
AVAILABLE FROM	National Centre for Vocational Education Research, 252 Kensington Road, Leabrook, South Australia 5068, Australia (Cat. no. 978; $27.50 Australian). Tel: 08 8333 8400; Fax: 08 8331 9211; e-mail: vet_req@ncver.edu.au; Web site: http://www.ncver.edu.au. For full text: http://www.ncver.edu.au/research/proj/nr0017.pdf.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	Achievement Tests; Educational Needs; Educational Research; Employer Attitudes; Employment Qualifications; *Evaluation Methods; *Evaluation Research; Evaluators; *Examiners; Focus Groups; Foreign Countries; *Industrial Training; Literature Reviews; Postsecondary Education; Questionnaires; Research Needs; Secondary Education; Stakeholders; *Student Evaluation; Vocational Education
IDENTIFIERS	Australia; Employer Surveys; *National Training Packages (Australia); Registered Training Organizations (Australia)

ABSTRACT

Researchers examined the management and conduct of assessments at the diploma and advanced diploma levels within training packages across Australia. The principal data collection activities were as follows: (1) a literature review; (2) examination of seven training packages; (3) a survey completed by 28 registered training organizations and 33 assessors; and (4) focus groups and interviews with selected stakeholders, including industry training advisory body representatives, an assessor network, and a reference group of industry practitioners. The following were among the issues identified by the research: (1) the assessors perceived considerable ambiguity in the competency standards within training packages; (2) most assessors identified a need for more assessor skills and experience and more time and resources to complete quality assessments; and (3) an estimated 65% of training providers registered for the higher-level qualifications in the training packages reviewed do not deliver training or assessment services for those qualifications. The study also established that assessors working at the diploma and advanced diploma levels need skills in two broad areas--the skills to develop a holistic or integrated assessment approach and knowledge of learning and assessment theory. Nine areas for further research were also identified. (Twenty-two tables are included. The bibliography lists 37 references. The survey questionnaire is appended.) (MN)

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ISBN 1 74096 090 4 print edition
1 74096 091 2 web edition
TD/TNC 70.62

Published by NCVER
ABN 87 007 967 311

252 Kensington Road, Leabrook, SA 5068
PO Box 115, Kensington Park, SA 5068, Australia
www.ncver.edu.au

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Executive summary

This project investigated the conduct of assessments at diploma and advanced diploma levels. The focus of the investigation was to evaluate how the assessment of diplomas and advanced diplomas in training packages is being managed and conducted and compares this with previous research and assessment theory. The study aimed to draw conclusions and to identify future research needs. It involved a literature search, review of selected training packages, survey of course co-ordinators and assessors working with the packages, interviews and focus groups. Seven training packages were the subject of the research.

While some aspects of assessment at these higher levels are consistent across training packages, there are differences in the competencies that have resulted in different assessment solutions. There are some consistent themes coming from the research that are common across the training packages.

Issues identified from the research

The research identified a number of issues, including the following.

- The assessors perceived a considerable level of ambiguity in the competency standards within the training packages. There are two views about this issue: the problem is due to training in assessment or the problem exists in some competency standards. (Ambiguity in this context is used to describe the uncertainty assessors have in accurately interpreting the standard of performance required in the unit of competency.)
- Most assessors working at diploma and advanced diploma level and participating in this research identified a requirement for more assessor skills and experience and the need for more time and resources to complete quality assessments, given the greater complexity associated with assessment at those higher levels.
- There are dimensions of underpinning knowledge, ethics, attitudes, values, creativity, problem solving and relationships that are part of competencies at diploma and advanced diploma levels. These dimensions are more complex than at other levels and therefore require careful management by assessors.
- A sizeable percentage of assessors working at these levels have only the basic assessment training specified and a varying length of assessment experience.
- While many registered training organisations (RTOs) have assessment policies and procedures specifically for these levels, others have limited policies and procedures, preferring to select specific people to assess at these levels and rely on the performance of the individual assessor.
- An estimated 65% of training providers registered for the higher level qualifications in training packages reviewed do not, in fact, deliver training or assessment services for these qualifications.
- Guidance provided in the training package materials about the higher level qualifications is limited and tends to be of a general nature.
- There are differences in approach to diplomas and advanced diplomas between the vocational education and training (VET) and higher education sectors that are recognised in

the Australian Qualifications Framework and lead to similarly named qualifications that are based on different sets of requirements. The research identified a number of actions that should be considered in order to improve the quality of assessments at diploma and advanced diploma levels. These include:

- training and professional development for assessors working at these levels, to equip them with the required skills that have been identified in the research
- inclusion of additional advice for higher level and more complex assessments within each training package to address its unique issues
- the state training authorities should review their policies related to the training providers registered for diplomas and advanced diplomas but not delivering training and/or assessment services
- registered training organisations placing more emphasis on the more complex nature of these qualifications in their policies and procedures; in particular, those related to assessor qualifications and experience, and ongoing quality assurance measures.

The study identified the following skills and knowledge required by assessors working at diploma and advanced diploma levels.

- The skills to develop an assessment approach which is considered holistic or integrated include:
  - development of an assessment plan across a unit or group of units
  - matching and combining evidence of performance
  - development of a diverse range of assessment methods that are inclusive of both the hidden and observable dimensions of performance
  - the ability to formulate an understanding of the dimensions of competency from the standards by networking with others
  - possession of strong negotiation and consulting skills to develop customised assessment procedures to suit the different assessment contexts.
- The knowledge of learning and assessment theory includes an understanding of:
  - alternative learning styles and associated cognitive theory
  - ethics, values and attitudes that may be a component of performance
  - patterns of communication, problem solving and judgement that a practitioner might use in the industry
  - the relationship between underpinning knowledge and performance at higher levels or poor assessments being made
  - the range of contexts from which performance should be sampled.

This study has identified that further research in this area should be undertaken. The following research questions have been identified.

- What changes need to be made to the descriptions within higher level units of competency in order to improve the quality of assessment?
- What are higher level generic competencies and how might they be identified and incorporated within training packages?
- What special features should be included in training and assessment systems to manage the training and assessments of higher level qualifications?
- What risk management strategies should be applied with assessments at higher levels?
- What are appropriate self-assessment and peer assessment systems and methods for use in training packages?
- What measures should be introduced to improve articulation between VET diplomas and advanced diplomas and those accredited by higher education?

- What are the cost advantages/disadvantages of different assessment methods at higher levels?
- How appropriate is the provision of standard assessment instruments at higher levels (given the increased diversity of workplace performance)?
- What is best practice in the measurement of attitudes, ethics and values within higher level qualifications?

Introduction

Background to the research

The research looks at current assessment practice at diploma and advanced diploma levels within training packages and compares this with previous research and assessment theory. The conclusions drawn cover consideration of the quality of the assessment practices, possible directions for improvement and areas where further research is required.

This study flows from the researchers' experiences gained from training assessors who conducted assessments against higher level endorsed competency standards prior to the introduction of training packages. These assessments were mainly conducted in the workplace.

The researchers have been training assessors and providing continuing professional development for some years. Most trainee assessors participating in the training have proceeded to conduct assessments for certificates I to IV, but a small number have been involved in assessment of higher order competencies. These were in the areas of public services, information technology and management. Discussions with assessors during professional development sessions revealed some difficulties with assessment of higher level competencies.

The introduction of training packages has created new contexts for assessment, and it is important that the quality of assessment is maintained. Assessors should have access to appropriate training, information, guidance and support materials to undertake quality assessments at these higher levels. It is also important that appropriate quality assurance systems are in place.

Preliminary scanning of available literature in 1999 indicated that considerable research was available about assessment practices for general vocational qualifications and for assessments at professional levels. Little literature existed that addressed assessment practices at sub-professional levels—that is, diploma and advanced diploma levels.

Considerable numbers of diplomas and advanced diplomas are awarded by the vocational education training (VET) sector, with about 11% of students being enrolled at the diploma or higher levels in the year 2000. About 23% of these were enrolled in training package-related courses, and this percentage is rapidly increasing each year. This represents about 40 000 students in 2000. As registered training organisations (RTOs) transfer from older courses to training packages it is expected that this figure will rapidly exceed 100 000.

Goals of the research

The research was conceived as a general investigation, giving an overview of current practices in the context of theory and best practice that would suggest improvements and identify areas for more work. The following research questions were addressed.

- What diploma and advanced diploma qualifications have been included in training packages?
- What is the nature of skills and knowledge specified in these qualifications?

- What assessment issues specific to these qualification levels have been addressed in the registered training organisation's assessment approach?
- How have the complex skills in these qualifications been assessed?
- How has the underpinning knowledge and application of underpinning knowledge been assessed?
- How have assessment approaches, issues encountered and solutions attempted impacted on the quality of outcomes? (for example, assessment of trainees, standards of qualifications)
- What are the specific assessment skills required for assessors completing assessments at Australian Qualifications Framework levels 5 and 6?

The researchers have completed this project with limits on its scope. The aim was to determine whether the difficulties observed in practice were real or imagined, and if there were issues, to define them, and to point towards potential solutions from prior research or to define the requirement for more research.

During the preliminary stages of this study, it became apparent that there were strong links between the nature of diploma and advanced diploma qualifications, the structure of the competencies and the assessment environment. Later stages of the study researched aspects of these linkages.

Level of prior work

Diplomas and advanced diplomas have been awarded by VET training providers for many years, originally under the previous titles of associate diploma and diploma.

Research into assessment in Australia has largely focussed on more general issues within the VET sector rather than on assessment at sub-professional levels. In some of the research and policy documentation there appears to be an implicit assumption that assessment of diplomas and advanced diplomas is little different to assessment at lower levels. A finding of this research is that there are differences in at least some of the assessments at the higher levels.

Some Australian research papers, principally from the early 1990s, proposed that competency and assessment at professional levels was different in character (Masters & McCurry 1990; Gonczi, Harper & Oliver 1990; Heywood, Gonczi & Hager 1992). These are based primarily on the concepts of what is considered professional work. The papers and the proposed differences are examined in more detail in a later section. Equally, there are some overseas books and papers discussing assessment at professional levels.

Concurrent work by Boorman (2002) and Johnstone and Evans (2001) has been considered in conjunction with this research. In addition, this paper refers to other research which has incidentally touched on relevant assessment issues. For example, Dumbrell, de Montfort and Finnegan (2001) researched the outcomes for graduates and module completers who studied in associate diploma, diploma and advanced diploma courses.

Outline of methodology

The research was conducted in four stages and included some key activities that are summarised below.

Literature review

The literature review commenced in 2000 by identifying prior work on assessment practices at diploma and advanced diploma levels. As these qualification titles and the descriptors

describing the qualifications are Australian, this search was restricted to Australia. A search identified work in the 1980s and early 1990s relating to the development of competency standards and the application of competency standards in the professions. Notable were several papers in the mid-1990s which addressed:

- industry research and assessment issues regarding specific diplomas (for example, Booker 1995)
- papers reflecting assessment experiences of the professions as a basis for consideration of higher vocational levels (for example, Hager 1995 and Hager & Gillis 1995).

At this point the literature search was widened to examine both Australian and overseas research at higher education levels, both vocational and university based. The majority of this work either reflects consideration of the professions or addresses generically assessment at higher occupational levels. Recently, there has been some consideration of assessment at the diploma levels by others (Boorman 2002; Johnstone & Evans 2001).

The view was formed that there is limited Australian research material on assessment practices at higher levels in VET. Consequently, other documentation, such as assessor kits, has been accessed to inform this study. Various themes have been identified in the literature and discussed in later chapters.

Survey

The survey was structured around the literature review and prior discussions with researchers, managers and assessors from registered training organisations and practitioners in industry. The survey was divided into two components:

- questions for course co-ordinators covering the RTO and departmental assessment arrangements (that is, at a systems level)
- questions for assessors about their assessment practices.

In total, 28 registered training organisation co-ordinators and 33 assessors responded to the survey. Seven training packages were selected as the basis for the survey. They were selected for their coverage in primary, secondary and tertiary industries. Training providers to be approached were selected from lists of those registered to deliver the target training packages.

The number of registered training organisations completing the survey was significantly lower than planned because an estimated 65% registered for diplomas and advanced diplomas do not deliver the qualification. This estimate is based on replies to the survey.

The survey questions are provided in the appendix.

Consultations: Focus groups and interviews

Following the survey, several types of consultation were organised. The purpose of these consultations was to explore in more depth the issues identified in the survey. Three types of consultation were conducted:

- distribution of interim findings to industry and research colleagues for comment
- interviews with some stakeholders, including industry training advisory body representatives, an assessor network, people from a state training authority, and a reference group of industry practitioners
- focus groups that reviewed the findings of the survey.

Both written and verbal responses were received. Stakeholder responses generally confirmed the survey findings and, in some areas, they expressed stronger opinions than the survey participants.

Distinctive characteristics of the diploma-level qualifications

Descriptors for qualifications

Diplomas and advanced diplomas are two qualifications within the Australian Qualification Framework. The characteristics of these and all other qualifications are described in the *Australian Qualifications Framework implementation handbook* (AQF Advisory Board 1996).

Assessment requirements for a qualification may be influenced by its defined characteristics. This chapter discusses the characteristics of diplomas and advanced diplomas and compares them with other qualifications.

One aspect of the research has been to examine the training package qualifications, the approach(es) taken by assessors and to compare this information against the descriptors and guidance provided in the implementation handbook.

Differences between certificate and diploma levels

The *Australian Qualifications Framework implementation handbook* (AQF Advisory Board 1996) defines the characteristics of certificates I to IV as well as the two diploma levels. These six levels of qualification comprise the range of VET qualifications.

There are considerable differences in the requirements across the range of qualifications. Table 1 lists the definitions for some of the distinguishing features of the learning outcomes—that is, knowledge, problem solving, range of tasks and responsibility—for certificate I, certificate IV, diploma and advanced diploma qualifications.

The words in italics are the characteristics that differ from the characteristics stated at the lower Australian Qualifications Framework level. Table 1 does not provide any distinguishing features for practical skills at certificate IV, diploma and advanced diploma levels. This does not mean that practical skills are to be ignored. The features of the practical skills are dealt with elsewhere in the chapter 'Nature of higher level competencies and their assessment'.

The requirements for meeting a characteristic tends to be more demanding as one moves from left to right towards the higher level qualifications. It can be seen from table 1 that the scope and complexity of competency (and its assessment) that is expected of diploma students is considerably more challenging than for certificate students. Thus the evidence required by assessors of an advanced diploma student should encompass wide, and in some cases deep, demonstration of knowledge, analytical, planning, design and other conceptual skills, and accountability for their own actions and of others. Limited assessment on one or two occasions is unlikely to provide the scope of evidence required for a valid and reliable judgement at these levels.

Table 1: Some distinguishing features of some certificate and diploma qualifications

Characteristic	Certificate I	Certificate IV	Diploma	Advanced diploma
Knowledge	Demonstrate knowledge by recall in a limited range	Demonstrate understanding of *a broad knowledge base incorporating some theoretical concepts*	Demonstrate understanding of a broad knowledge base incorporating theoretical concepts, *with substantial depth in some areas*	Demonstrate understanding of *specialised knowledge* with depth in some areas
Problem solving	None defined	Apply solutions to a *defined range of unpredictable problems*	*Analyse and plan* approaches to *technical or management requirements*	*Analyse, diagnose, design and execute judgements* across a broad range of technical or management functions
Practical skills	Demonstrate basic practical skills such as the use of relevant tools	None defined	None defined	None defined
Information	Receive and pass on messages/ information	*Identify, analyse and evaluate information from a variety of sources*	Evaluate information using it to *forecast for planning or research purposes*	Generate ideas through the *analysis of information and concepts* at an abstract level
Range of tasks	Perform a sequence of routine tasks given clear direction	*Identify and apply skills and knowledge areas to a wide variety of contexts with depth in some areas*	*Transfer and apply theoretical concepts and/or technical or creative skills to a range of situations*	Demonstrate a command of *wide-ranging, highly specialised technical, creative or conceptual skills*
Responsibility	None defined	Take responsibility for own outputs in *relation to specified quality standards*	Take responsibility for own outputs in relation to *broad quantity and quality parameters*	Demonstrate *accountability for personal outputs within broad parameters*
		Take limited responsibility for the *quantity and quality* of the output of others	Take limited responsibility for the *achievement of group outcomes*	Demonstrate *accountability for group outcomes* within broad parameters

By way of contrast, table 1 shows that assessment at certificate levels involves gathering evidence of more routine actions, requires a more limited range of judgements and practical skills within a limited scope of responsibility. Competency in many of the units at these levels can be demonstrated through evidence obtained in a relatively short time. Therefore, in comparison with assessment at certificate levels, diploma-level assessments require exploration of cognitive processes and judgements made in the process of performance.

Differences between diplomas and professions

The professional occupations are generally associated with a qualification at degree level or higher, although some professions accept people with diploma-level qualifications plus experience or ongoing development as sufficient for admission to their ranks. Degree-level qualifications are distinguished by the nature of the learning outcomes in the course.

Table 2 compares these learning outcomes with the equivalent learning outcomes for the advanced diploma. The table shows that the degree level of qualification has different bases; for example, the coherent body of knowledge with associated concepts and problem-solving techniques, development of skills for ongoing acquisition of knowledge and techniques, and preparation for higher studies. There is no direct comparison between the advanced diploma and degree.

Many professions use competency standards at graduate and professional levels to describe performance. These standards influence the outcomes of some degree courses, but not necessarily the learning styles and structures. Assessment of undergraduates is largely by traditional means, namely through assignments exploring knowledge and understanding, tests and written examination.

Table 2: Learning outcomes for advanced diploma and degree qualifications

Advanced diploma	Breadth, depth and complexity, involving analysis, diagnosis, design, planning, execution and evaluation across a broad range of technical and/or management functions including development of new criteria or applications or knowledge of procedures.
	The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in the outcomes is involved.
	Applications involve significant judgement in planning, design, technical or leadership/ guidance functions related to products, services, operations or procedures.
	The degree of emphasis on breadth as against depth of knowledge may vary between qualifications granted at this level.
Degree	The acquisition of a systematic and coherent body of knowledge, the underlying principles and concepts, and the associated problem-solving techniques.
	Development of the academic skills and attitudes necessary to comprehend and evaluate new information, concepts and evidence from a range of sources.
	Development of the ability to review, consolidate, extend and apply the knowledge and techniques learnt.
	A course leading to the qualification also usually involves major studies in which significant literature is available. Course content is taken to a significant depth and progressively developed to a high level which provides a basis for postgraduate study.

Source: These details are extracted from the *Australian Qualifications Framework implementation handbook*, AQF Advisory Board 1998, p.9

Assessment of graduates and people seeking higher professional standing may include competency standards and competency-based assessment. The aim may be to assess that the candidate is able to perform independently at a 'professional level', which would include conforming to the ethics of the profession. The concern expressed by the professions in the early 1990s (Gonczi, Hager & Oliver 1990; Heywood, Gonczi & Hager 1992; Masters & McCurry 1990) was that the assessment should cover all aspects of the profession—that is, the concept of 'holistic assessment' was promoted.

This study has not examined the differences and similarities in assessment approaches between diploma, advanced diploma and degree.

Assessment requirements in training packages

The assessment requirements in training packages maintain and build on the requirements of the earlier National Training Board and Standards and Curriculum Council guidelines for competency standards and qualifications (National Training Board 1990, 1991, 1992; Standards & Curriculum Council 1996). The training package guidelines specify that a training package should contain substantial guidance on assessment in terms of assessment guidelines and assessment materials.

Other areas within training packages that impact on assessment are the learning pathways and professional development. Training packages are expected to facilitate a wide range of learning pathways to qualifications. Assessments supporting these learning pathways therefore need to cover a wide range of contexts. This includes references to assessment and recognition of prior learning.

The *Updated guidelines for training package developers* (ANTA 1998b, p.53) identifies the types of materials that could be included in a training package as:

- introductory workshop material, developed to explain particular learning pathways including New Apprenticeships as well as approaches to training and assessment
- assessor/Recognition of Prior Learning (RPL) guides
- industry-specific assessor training workshop materials.

The requirements for format and content of the competency standards continue on, with key technical quality requirements being that:

- the Range of Variables statements provide a full context for unit assessment
- Evidence Guides link to the Performance Criteria and Range of Variables and establish underpinning knowledge and skills and the key aspects for assessment.

(ANTA 1998b, p.16)

The *Training package development handbook* (ANTA 2001) expands on these areas and others that are especially important in assessment of diploma and advanced diplomas. For example, knowledge and understanding are discussed in the following terms:

> The application of knowledge is often the key to the transfer of competency to new situations. In addition, underpinning knowledge will often need to be assessed in order to ensure that the person understands the 'why' as well as the 'how' . . .
>
> Knowledge and understanding:
>
> - should be placed in context
> - should only be included if it refers to knowledge actually applied to work
> - could be referred to in the performance criteria and the range of variables and specified in the evidence guide.
>
> (ANTA 2001, Section 2.1.3.2)

The characteristics of diplomas and advanced diplomas require that knowledge and the application of knowledge be more extensive than at certificate levels. In addition, the range of contexts in which competency is demonstrated are likely to be more diverse.

The handbook later expands on these requirements, providing advice that a level of detail is required about the extent of underpinning knowledge. Table 1 identifies the important role of knowledge in performance at diploma and advanced diploma levels. At diploma level, a broad knowledge base with substantial depth in some areas is required. At advanced diploma level, a depth of specialised knowledge is expected in some areas. Equally, the range of contexts is expected to be broad.

In addition, the handbook refers to industry values and attitudes as these relate to assessment:

> The values and attitudes intrinsic to an industry or enterprise influence the achievement and exercise of competency. They are not necessarily appropriate, or capable of being reflected in the performance outcomes at industry or cross-industry level.
>
> (ANTA 2001, section 2.1.3.2)

The handbook then proceeds to provide an example from the hospitality/tourism industry where industry values and attitudes are outcomes-focussed. 'Working colleagues and customers' specifies the requirement of an open, friendly, courteous, polite manner, appropriate voice tone, body language and active listening. 'Working in a socially diverse environment' includes treating people from all cultural groups with respect and sensitivity, crossing language barriers and resolving misunderstandings.

In the community services industry, where ethical practice is regarded as significant, industry ethics and values have been documented in the assessment guidelines of the Community Services Training Package. This is intended to provide broad instructions for assessors, especially those assessing at higher levels.

The research literature also places importance on values, ethics, attitudes and attributes at higher levels of competency and in the assessment of these competencies. For example, Hager and Gillis (1995, p.68) state:

> Although attitudes and values are important in all occupations, they are particularly significant in occupations at the higher ASF [now Australian Qualifications Framework] levels. For instance, at the higher ASF levels it is more likely individuals are responsible for the well being of other workers, and there may be a requirement for adherence to codes of conduct.

As the assessment guidelines are an endorsed component of a training package, it could be expected that these assessment guidelines might address specific issues in assessment of diplomas and advanced diplomas that are relevant to that industry or sector. However, a search of a number of training packages revealed only two (agriculture and horticulture training packages) that had brief references to assessment at these levels. The content of the assessment guidelines gives only broad guidance at a systems level. The registered training organisations and assessors are therefore faced with the difficult task of translating the broad guidance to the specific requirements and contexts of their clients.

Assessment materials can be included in training packages as non-endorsed components. Only some training package developers (for example, community services, hospitality) have provided materials to assist assessors. Making such materials readily more available would reduce ambiguity in interpretation of the competency standards.

Nature of higher level competencies and their assessment

In this chapter, we analyse what the literature tells us about the nature of higher level competencies and look at the underlying theory related to their assessment. The literature search revealed themes that are summarised below.

Concurrent project

The Australian National Training Authority (ANTA) Training Package Assessment Materials Project began after the commencement of this research and was completed before this final report. One of the products of the project (Johnstone & Evans 2001) specifically deals with assessment at higher levels, including:

- the nature of higher level competencies
- development of assessment strategies and tools
- assessment of attributes (that is, ethics, values and attitudes)
- assessment of complex technical knowledge and skills
- design of simulations
- assessment of whole job roles.

Johnstone and Evans designed a 'how to' guide and address the underlying theory in a limited manner. Their approach is to provide advice about an issue and to present examples and solutions, many of which centre around the use of assessment templates.

Integrated or holistic assessment

Integrated or holistic assessment is seen by many within the VET sector as the preferred approach to assessments at all levels. For example, the *Training package for assessment and workplace training* (ANTA 1998a), which includes both certificate IV and diploma-level qualifications, promotes integrated assessment in the Guidelines for Designing Assessment Resources as follows:

> To ensure assessment is not narrowly based on tasks but embraces all aspects of workplace performance an integrated, holistic approach to assessment is recommended. The assessment procedures should be designed to assess an entire unit of competency, or a combination of units, to ensure that all dimensions of competency are satisfied.
>
> (ANTA 1998a, p.14)

In discussing assessment of higher level competencies, Hager and Gillis (1995, p.65) state:

> Integrated or holistic competency-based assessment should be used wherever possible to cover multiple elements and/or units of the competency standards . . . When developing an holistic assessment, the first step is to determine which assessment methods are most capable of assessing competence in an integrated manner. Integrated approaches seek to combine knowledge, understanding, problem solving, technical skills, attitudes and ethics in assessment.

Booker (1995) gives one approach to integrated assessment. She recommended that the following process be used to develop an assessment plan for higher level units in the Library Competency Standards:

- examine each unit for possible assessment characteristics
- identify the underpinning knowledge and understanding requirements for each unit
- tabulate the areas of knowledge and understanding by unit, grouping like areas of knowledge and understanding
- build the assessment approach around this grouping.

The discussion in the previous chapters and below is based on the general acceptance that integrated approaches are being used.

Complexity in competencies and assessment

The literature identifies that higher level competencies are more complex. These competencies make the task of the assessor more difficult. Another dimension of complexity is the wider range of applications where these competencies are used.

The complexity of higher level competencies is a widespread theme in the literature. This is self-evident when the Australian Qualifications Framework descriptors are examined (refer table 1).

Researchers have provided a number of views about the nature of the complexity. Booker (1995, p.3) has identified the following:

- increased depth and breadth of knowledge and skill base
- a wider range of workplace contexts
- greater autonomy, more responsibility and accountability
- different types and wider range of decision making
- solutions to problems may be complex and indeterminate, and include ethical issues
- focus of work may be on longer term outcomes
- may involve synthesising information in new ways
- that it is a combination of these features which are significant in determining that the work is complex.

Hager and Gillis (1995, p.59) summarised higher order competencies as:

> the more generic, less specific, higher order competencies needed for successful performance in professional and skilled work. Such higher order competencies include things like establishing rapport with a client, thinking critically, acting creatively, solving non-routine problems, making decisions, reflecting on performance etc. Typically higher order competencies relate to less routine aspects of work where the worker is called on to frame a skilled and appropriate response to an (often) unique situation. Competency standards for many occupations specify such 'situational understanding'.

Other researchers describe professional competencies in similar terms, with the addition of a range of attributes that are seen as common in professional competencies. These include complying to ethical standards and personal qualities such as initiative, persistence, restraint and influence skills. Eraut (1994) sees professional practice in terms of 'an integrated mixture of types of knowledge and modes of cognition that is difficult to unravel'.

The implication for assessment at diploma and advanced diploma levels is that assessment of performance that simply involves observations of process or basic questioning generally will not be sufficient to capture the dimensions of higher levels of competence. At these levels, the

collection of evidence should reflect a suitable range of contexts, the use of bodies of knowledge and related theory, the longer term outcomes, complex judgement and decision making.

The complexity at higher levels is seen by researchers as having different dimensions when considering the assessment environment. For example:

- range of workplace contexts that are seen as significant (Hager 1999, p.8; Muhlhan 1995)
- less routine nature of the work (Booker 1995, p.2; Hager & Gillis 1995, pp.60–62)
- less specific competencies being observed (Hager & Gillis 1995, p.60)
- competencies may focus on longer term outcomes (Booker 1995, p.3)
- experienced practitioners may use 'idiosyncratic strategies' to reach conclusions and develop courses of action (Masters & McCurry 1990, p.12 referring to professional work)
- workplace judgements form a significant part of performance (Hager & Beckett 1999, pp.1–4).

This view is not universally accepted, with a minority of assessors surveyed asserting that these differences have no impact on the assessment environment and requirement for assessment skills.

'Idiosyncratic strategies' are referred to by a range of names by researchers (Jessup 1991; Masters & McCurry 1990; Hager 1999) and occurs when experienced people across all occupations use a mix of formal learning and experience to make decisions during performance. This is discussed in more detail later in this chapter.

How assessors manage complexity in assessment

When considering assessment of higher level competencies, there may be a tendency for assessors to use 'gut feelings' to deal with the complexity of the assessment task. Our research led us to the view that experienced assessors can, in fact, make reliable judgements of competence based on their 'gut feelings'. This view was reinforced by the observation that they often had difficulty articulating the basis for the judgements of competence they were making. Where assessors use 'gut feeling', it is difficult to demonstrate validity and reliability to auditors from a state training authority.

This suggests assessors need more skills and knowledge (and possibly experience) to manage the more complex role of assessing higher level competencies. 'Gut feeling' may also be used by the assessor to address circumstances where the observed performance goes beyond the dimensions of a checklist.

Assessment methods therefore may need to be more context-specific and appropriate to the candidate's work role if they are to deal with these complexities. In the current research, assessors commented on the need to vary workplace assessments. A preliminary review of the candidate's work environment and expected work outcomes may be necessary to assess whether an existing assessment instrument is appropriate, needs to be modified, or whether a new assessment plan and new materials need to be developed.

Varying workplace outcomes

An important observation by authors (Hager & Gillis 1995; Booker 1995; Eraut 1994; Muhlhan 1995) is that graduates of higher level and professional courses work in diverse situations and, consequently, their workplace outcomes are more varied than for more routine work. At professional levels this diversity can be very significant.

The research literature includes a number of references to the importance of the workplace context and specific workplace situations in the higher level competencies. At least three dimensions of context have been identified within these papers:

- the characteristics of the organisation
- the type of action to be taken—that is, the area of competency to be applied
- the uniqueness of the problem or issue and the required workplace outcomes.

As Eraut (1994, p.22) notes:

> Different kinds of performance may be expected in different situations, so it is useful to think in terms of
>
> (a) the performance repertoire (what the performer can do)
>
> (b) the ability to select an appropriate approach from the repertoire (knowing what to do when)
>
> (c) the ability to adapt the approach to fit the situation (adaptive modification of performance).

Jessup (1991, p.123) describes the variation in work and context as an important characteristic of higher level competencies in the United Kingdom National Vocational Qualifications:

> Coping with variation, as opposed to performing routine and proceduralized function, provides a primary distinction between low and high level occupations in the NVQ framework. In particular, coping with variation which cannot be anticipated is a characteristic of the most demanding jobs, at the forefront of development and innovation in a profession.

In terms of professional competencies, Hager (1993, p.5) states:

> . . . some people worry that competency standards will demand a uniformity in the way professionals practice that is totally inappropriate. It is pointed out that there is more than one correct way to perform most professional tasks. The problem here is that 'standards' are taken to imply 'standardization' of procedure. In fact the standards are typically about outcomes, and leave it open as to how the outcomes are achieved. The professional competency standards that have been developed so far in Australia do allow for diversity that is proper to the practice of a profession.

The research indicates that people working at diploma and advanced diploma levels operate in diverse work contexts.

Diversity of workplace outcomes can impact on assessment in different ways. If the competency standards are written to include diverse workplace outcomes, competent performance is likely to be determined on a sample of evidence covering a small section of the range of contexts. How much evidence is required? Should this be specified by the industry, or should the registered training organisation or assessor make their own judgement? Should the assessor gather evidence on a relatively small sample of performance and rely more heavily on assessment of underpinning knowledge and understanding to determine the candidates' ability to transfer their competence to new workplace contexts?

If the full range of contexts is not described, then the training will not be designed to prepare a student for the range of workplace contexts that industry might expect the graduate to manage, and it follows that the assessor would not sample the wider performance in gathering evidence and therefore call the validity of the assessment process into question.

Knowledge and understanding

The role of knowledge and understanding in higher level competencies is widely discussed by researchers (Wolf 1990; Eraut 1990; Jessup 1991; Eraut 1994; Mansfield & Mitchell 1988; Mansfield 1990; Mitchell & Bartram 1994 and Hager 1999). What is meant by 'knowledge' and 'understanding' is also discussed.

From our review of research literature, knowledge is taken to mean one or more of the following:

- knowledge about one or more subject areas, which may be basic, reasonable or comprehensive
- knowledge of one or more processes, which may be limited to what to do, or more extensive covering what it is and how it works
- knowledge of standards of good practice or legislative requirements
- knowledge of sources of knowledge
- knowledge of various decision-making processes
- knowledge of competing and collaborating theories and practices
- knowledge of a workplace context, including the organisation, people and practices
- understanding developed from personal reflection
- situational and practice understanding developed from one's own and/or colleagues' experience
- intuitive understanding of good or expert practice.

Understanding is used by some researchers to emphasise the aspect of knowledge in action or knowledge being used within the overall competence (Wolf 1990; Eraut 1990; Jessup 1991; Eraut 1994; Mitchell & Bartram 1994).

The relationship between the various forms of knowledge and competency has been explored in a range of ways (Wolf 1990; Mansfield & Mitchell 1988). The relationship is seen as complex, especially when higher level competencies are considered.

There is a strong perception that knowledge and understanding are essential to higher level competence:

> In many areas, particularly at higher levels of competence, there is a related body of knowledge and theory which underpins a wide range of competent performance.
>
> (Jessup 1991, p.125)

> . . . the extent of knowledge required and its centrality to the unit differs at different levels of the ASF [Australian Standards Framework] . . . competency at the higher levels of the ASF, e.g. 5, 6 and 7 requires an increasing depth and breadth of knowledge, understanding and skills base . . . essential for effective performance. (Booker 1995, p.7)

However, there is little recent discussion on what is considered appropriate in the assessment of knowledge as a component of the overall assessment. Wolf (1990), citing United Kingdom research, proposed that knowledge is a lower order measure of competence behind evidence of performance. Yet our work has shown that the specification and assessment of knowledge and understanding is considered important in the Australian context. There have been suggestions from researchers and inquiries (Booker 1995; Senate Report 2000) that additional information be included in the competency standards statements. For example, Booker (1995, p.5) comments on the specification of underpinning knowledge in higher level competencies.

> The key issues for the Australian Library Competency Standards are that
>
> - the requirement for knowledge and understanding is implicit and not explicit means that the standards can be (and are) taken to imply a lack of recognition of knowledge and understanding

and, particularly as an issue for assessment,

- the lack of specification of the underlying knowledge base can lead to enormous variation in what assessors . . . assume to be required.

Down (2001, p.4) discusses issues with underpinning knowledge in training packages, based on the work of a group of researchers/evaluators and notes:

> The findings of the study clearly indicate that there are wide-spread, persistent and damaging differences in the VET sector—and at every level in the sector—in the way Underpinning Knowledge in Units of Competency in Training Packages is conceptualised and used.

She goes on to state that the specification of knowledge in units of competency is a more subtle and difficult task than simply listing the 'what and why' knowledge that is typically included in most training packages. The evaluation recommends that the specification for the design of units of competency be adjusted to better define what is called 'embedded knowledge' (Down 2001, p.6). This finding is similar to those of Mansfield (1990) in the United Kingdom.

The conclusion that can be drawn from the research literature is that traditional forms of assessment—that is, written and oral testing—are often considered adequate for gathering evidence about underpinning knowledge. Johnstone and Evans (2001, p.48) when discussing assessment at higher levels, concur with that view, then go on to state:

> . . . it is important to assess whether candidates possess the required knowledge and can use it to:
>
> - analyse new situations
> - make predictions based on past experience
> - evaluate work performance
> - reflect and learn from experience.

Assessors are more likely to achieve valid and reliable assessments if they are given an adequate specification of underpinning knowledge and understanding. There is a view among some researchers that Australian competency standards are inadequate in this area.

Attitudes, ethics and values

Attitudes, ethics and values are seen by researchers as important components of higher level competencies and having even greater significance at professional levels. These components of competency may be embedded in the nature of the work and performance outcomes (for example, empathy in the caring occupations) or they may come from industry standards (for example, dimensions of customer service in hospitality and tourism industries) or from occupational standards (for example, codes of ethics in many professions).

Hager and Gillis (1995) discuss potential problems with assessing attitudes and beliefs. They refer to research in the behavioural sciences where there have been difficulties in assessing attitudes and values in isolation. There is significant motivation to provide socially acceptable responses during assessment. They comment that:

> The difficulties associated with assessing attitudes have led some people to argue that competency assessments should be restricted to skills and knowledge (that is, attributes that are easily observable). Excluding attitudes and values that are specified with the performance criteria would, however, undermine validity. (p.69)

They recommend an integrated approach to assessment and the use of multiple methods of assessment.

In addition, in relation to complex competencies at higher levels, Booker (1995, p.5) noted: 'Attitudes, values, ethics and adherence to issues of principle such as access, equity, accountability, confidentiality, etc. are both explicit and implicit across units within the Library Competency Standards'.

Thus it is clear that attitudes, ethics and values are important parts of the higher level competencies that should be addressed in the assessment. In the current research, several comments were made that in relation to the Diploma in Community Services (Children's Services), the attitude of the candidate towards children and their parents is critical.

Assessment of experienced practitioners

Discussion in literature

As mentioned previously, there are likely to be differences between the everyday performance of an experienced practitioner with respect to a newly qualified practitioner. The variation in performance is likely to be significant in that the experienced person may not appear to be following accepted bodies of knowledge or accepted practice.

For example, Masters and McCurry (1990, p.12) describe a case study of medical practitioners:

> What expert clinicians, for example, do in practice is surprisingly difficult to establish. The same individual often proceeds very differently with different clinical problems, and although medical students may be exhorted to adopt 'scientific' strategies of hypothesis formulation and testing, there is increasing doubt that experts make much use of these strategies in their everyday work.

One of the authors has observed a similar pattern with information technology practitioners. The experienced practitioners seem to match the problem and its characteristics with prior experience and develop a problem-solving strategy on that basis. The step-by-step problem-solving approach that is taught to trainee information technology practitioners is only applied when the experienced person confronts totally new problems.

The concept of an experienced practitioner who is a professional or skilled person working at a quite different level of performance based on prior knowledge, experience and reflective 'intuition' is discussed by several researchers. This intuitive performance comes from adapted understanding of generally taught theory. For instance, Jessup (1991, p.127) argues:

> Competent professionals tend to acquire a set of guiding principles, of which they are often are [sic] only partially conscious, derived largely from experience. These may build on 'academic' theories and knowledge or may be only loosely related. While this is recognised in areas such as management, it also appears to be true in well established professions such as medicine.

Eraut (1994, ch.8) also identified the issue of the competence of experienced professionals as being more highly developed, being based in experience and more strategic in nature. The issue this poses for an assessor is how to determine whether the competencies to be assessed relate to a practitioner with little or considerable experience. Although most experienced practitioners are unlikely to be presenting for assessment (having already obtained their qualifications), the increasing use of recognition of prior learning/recognition of current competency assessment by experienced practitioners seeking promotion or new opportunities has brought this issue into greater prominence.

Associated with this is the level of judgement that the candidate should demonstrate as part of the assessment. Hager (1999, p.9) discusses higher level competencies in terms of the judgements made by practitioners in the workplace:

> Workplace practical judgements are not simply 'rational', but are highly integrative. Involving the full gamut of human attributes, they integrate the cognitive, the practical, the ethical, the moral, the attitudinal, the emotional and the volitional.

Hager and Beckett (1999, p.2) later describe ongoing research which is exploring the way workplace judgements are made by practitioners. They propose that learning involves workplace judgements and state 'that workplace learning is primarily a growing capacity to make appropriate judgements in the particular circumstances that occur in one's workplace'.

Thus at higher levels, workplace performance may involve processes and decisions which do not have totally rational bases, may not equate to theory learned in traditional institutions, and may vary depending on context. Such dimensions of performance are more likely to be seen in experienced practitioners.

Implications for assessment

An assessor in an institution working with candidates who generally have limited workplace experience and possibly only simulated experience is less likely to experience variations in the dimensions of performance due to workplace experience. At the same time, such graduates are likely to need workplace experience and reflective learning to be accepted as experienced practitioners.

If, however, the specified performance in the unit(s) of competency is based on the development of understanding, judgement and decision making learned during workplace experience, the assessment needs to explore workplace experience following, or in conjunction with, formal learning. This type of assessment would need to be based more on the specific workplace experience and context(s).

The assessor in the workplace observes candidates who range from experienced to inexperienced. An experienced candidate seeking skills recognition or recognition for prior learning will often exhibit this 'idiosyncratic' performance. Thus the assessment tools have to be customised to the assessment circumstance and the assessor may have to exercise judgement about workplace outcomes in order to define competent performance.

This raises the following issues of assessor training, assessor experience and reliability of assessment.

- To our knowledge, no assessor training course addresses this type of problem, and assessor professional development does not cover the possibility of experience modifying performance.
- Any issue of 'idiosyncratic' performance raises special issues where assessment teams and subject matter experts are used.
- Are there situations where 'idiosyncratic' performance is considered unsatisfactory performance?
- Are measures put in place by registered training organisations to manage the reliability of assessments where 'idiosyncratic' performance is observed?

Assessment approaches at higher levels

Booker (1995, p.11) discusses assessment approaches for higher level, complex assessments in some detail. She acknowledges that the assessment processes are similar for all levels, but higher level assessments need to address:

- the larger knowledge base at higher levels, and the criticality of actions at these levels which are founded on the knowledge base
- the prior learning in the workplace from the previous and current work activities that form part of the overall competence.

Booker expands on these points by commenting that the relationship of knowledge to action should be explored. She refers to the assessment methods used in the professions as a guide to what should be used at higher levels. These include:

- projects/assignments (often drawing on real workplace situations)
- skill/work sample tests (i.e. using Dewy, Library of Congress Subject Headings [in relation to the Library Competency Standards])
- log books or diaries
- direct observation of work activities (practicum/fieldwork)
- evidence of prior learning
- marketing/business planning
- reference interviewing strategies (Booker 1995, p.11)

Booker identifies assessment problems at higher levels, including:

- confidentiality
- number of potential solutions to a given problem (requiring evidence of knowledge and performance)
- hidden competence (i.e. competence which is visible is only a small proportion of performance)
- long term outcomes may not be predictable (an assessment focus on the process which is followed to achieve effective outcomes) (Booker 1995, p.11)

Hager and Gillis (1995) provide an example of a set of six simulation exercises for graduate lawyers that cover the specialisation of family law. These simulated interviews are videotaped and assessed by a group of 'examiners' and cover a significant range of higher order competencies (Hager & Gillis 1995, p.66). They summarise this assessment as follows:

> . . . we should look to build into the assessment a wide variety of the higher order competencies that need to be assessed . . . In the case of family law, three methods proved to be sufficient for assessing candidates' competence. The three methods were the simulation, a knowledge exam, and the completion of a mock file.
>
> (Hager & Gillis 1995, p.67)

These examples suggest that the approach to higher level assessment involves:

- the analysis of the nature of the required skills and the related knowledge base
- the development of assessment plans specifying the evidence to be collected
- the management of more complex/diverse assessment environments, which may provide evidence that is difficult to interpret.

Indirect approaches

It is important to note that the bulk of the approaches recommended for higher levels fall into the category of 'indirect approaches'.

A practical example of this approach is the Department of Defence's assessor's kit (Department of Defence 2000), which discusses assessment approaches that the assessor should consider. At diploma level, suggested primary assessment strategies are all indirect—that is, work samples, workplace documents, third party reports and portfolio of evidence. At lower levels, direct observation of performance is recommended for most units.

An emphasis on indirect methods of assessment is also found in the training package assessment materials guide for higher level competencies (Johnstone & Evans 2001).

Some researchers discuss the appropriateness of self-assessment and peer assessments within the VET sector and at higher levels. Hawke and Griffin (1995) noted that self-assessment was not widely practised in the VET sector, although it is an option for some circumstances.

The Department of Defence's assessment kit refers to self-assessment as a possible option in the selection of assessment methods. It promoted the method as empowering, informing and allowing candidates to reflect on successes, mistakes and their future.

Many assessors are not trained under current competency standards to manage self-assessment and peer assessment approaches. It is likely that many will not consider the possible use of these approaches. This is an area where additional training or professional development may be required.

Approaches to improving assessments

The prior work covered in the literature includes advice on improving assessment practice at higher levels. The literature discusses:

- quality in assessment systems
- quality of competency standards
- appropriate training of assessors.

The views of assessors on the clarity and precision of competency standards are discussed in the summary of quantitative research. There was considerable concern expressed about the current quality of assessment systems. The research also reviewed the assessment systems and methods used by registered training organisations and assessors across various training packages. Training of assessors was also raised as an issue during consultations.

Quality in the assessment system

Assessment quality is a regular topic among assessors, training managers and accreditation authorities. The principles behind the quality assurance of assessment at higher levels are no different from other levels.

Bloch (1993) reports a British study that lists some steps that can be taken to maximise quality. These are (in order of significance):

- specify standards clearly and with adequate precision
- ensure that the assessment process is valid (that is, relevant to the standard)
- train assessors to interpret the standards consistently
- provide opportunities for assessors to network and compare practice
- establish verification procedures.

A recent project by VETASSESS (2000) when considering consistency in assessment (including the higher level competencies) observed that the Australian system is much more reliant on 'front end' quality assurance measures than other national VET systems.

This has been one of the reasons that additional quality assurance mechanisms have been introduced by ANTA and the state training authorities. The question of whether special attention should be given to assessment quality assurance at higher levels was explored in our research. There was a substantial view that higher level assessments should be supported by appropriate quality assurance mechanisms.

Quality of competency standards

Any future work to improve competency standards will need to be managed between ANTA and the 25 industry training advisory bodies. The project team examining consistency in competency-based assessment stated:

> Overall the Project Team found that the competency standards, assessments guidelines and assessment support materials in these Training Packages provided the basis for

> consistent assessment. However, the Team did identify a number of measures which could be taken to strengthen the current suite of competency standards. These included providing clearer specification of the purpose of the Range of Variables, enhanced technical advice on the design of units of competency at higher AQF levels, and the documentation of standards in Plain English. (VETASSESS 2000, p.3)

Earlier literature (Wolf 1990; Mansfield & Mitchell 1998; Jessup 1991) refers to two areas that have an impact on competency standards. The first area is the nature of performance that should be observed and its limits. In summary, these are:

- the overall range of performance, defined in the performance criteria and range of variables
- the contexts, situations, and organisational structures surrounding the performance, which are complex and are important to performance
- the ability to select and adapt an appropriate approach to suit the situation
- the fact that not all aspects of performance are likely to be seen in all contexts
- the capability of the organisation, which may impact on the individual's performance.

The second area is the appropriate specification of underpinning knowledge and its links with performance. Knowledge and understanding is considered to include a range of qualities that some would consider as underpinning skills.

Observable processes and outcomes are totally enmeshed with multiple dimensions of knowledge and understanding (Wolf 1990; Mansfield & Mitchell 1988; Eraut 1994 and Hager 1995). Also, separate specification of knowledge and its dimensions is recommended, including its links to performance (Mansfield & Mitchell 1988).

Thus the research literature concentrates on the quality of the competency standards when considering the various prerequisites for valid and reliable assessments. The dimensions of quality for higher level competencies not only include the specification of performance, but also the appropriate specification of knowledge and understanding.

The results of survey and focus groups further reinforced the view that assessors and other stakeholders have current concerns about the quality of the competency standards contained within training packages.

Assessor training

Training of assessors is complex, as they require training and/or experience in the areas in which they are assessing, as well as assessment training. These two dimensions were also examined in the research.

The works of Booker (1995) and Hager and Gillis (1995) make it clear that an assessor working with competencies at diploma and advanced diploma levels needs to address a range of dimensions in the assessment that is either more limited or not present in assessments at lower levels. They identify the competencies required by the assessors, including:

- the ability to deal with complex and at times somewhat subjective issues and to make decisions on multi-dimensioned evidence
- having time and resources to develop complex assessment plans and to reflect on the outcomes
- the ability to develop constructs about a candidate's performance over time, based on varying mixtures of evidence.

Multi-dimensioned evidence means evidence that demonstrates skills, knowledge and understanding that is described in various performance criteria, range of variable statements,

and components of the evidence guide in one or more elements of competency. The evidence may be collected from several sources, both direct and indirect, gathered over time.

The current *Training package for assessment and workplace training* (ANTA 1998a) identifies two levels of assessment skills to conduct the assessments and to develop the assessment system. The three components identified above are not explicitly addressed in the standards.

Quantitative research

This section includes statistics gathered from the National Centre for Vocational Education Research (NCVER) publication *Australian vocational education and training statistics 2000: At a glance* (NCVER 2001), field research involving a survey of registered training organisations and assessors, and the outcomes of interviews and related focus groups.

Incidence of diplomas and advanced diplomas within training packages

There are a considerable number of diplomas and advanced diplomas in 60 training packages. Some training packages do not include advanced diplomas, though most have at least one diploma. Table 3 shows the statistics as at January 2001.

Table 3: Survey of training packages

Total number of training packages surveyed	60
Total number of training packages with diploma or advanced diploma qualifications	50
Total number of diplomas in training packages	143
Total number of advanced diplomas in training packages	77

Some training packages have numerous qualifications at diploma and advanced diploma levels. For example, the Agriculture Training Package has four advanced diplomas and nine diplomas. The Community Services Training Package has nine qualifications at both levels.

This number of qualifications has increased by about 8% since August 2000. With some training packages still being developed, the number of qualifications is expected to increase substantially. In 2000, 11.4% of enrolments in training package qualifications were at diploma and advanced diploma level (NCVER 2001).

Survey of registered training organisations and assessors

A survey was conducted of selected registered training organisations and their staff who assess at diploma and advanced diploma levels. The training providers were selected from the National Training Information System website as being registered to deliver one or more qualifications at these levels in eight training packages.

In all, 201 registered training organisations from all states and territories, both government and private, were selected and contacted. Some were registered for several of the selected training packages but were asked to respond about one nominated training package.

The level of responses to the surveys was quite low. This was partly because over 50% of registered training organisations registered on the National Training Information System as

delivering diplomas and advanced diplomas are not offering the qualification for which they are registered. Most declined to participate in the survey on this basis. Other registered training organisations in the sample were approached up to three times to obtain a response.

Our impression from comments made by their contacts is that many of these organisations do not intend to utilise their registration. A few RTOs have prepared resources but for unknown reasons have not delivered training.

Our estimate, based on telephone calls and emails, is that 85 of the 201 registered training organisations are actually organisations delivering or have delivered some training at these levels. Of the 85, several are only delivering individual units within a qualification. The respondents to the survey were 28 RTO course co-ordinators and 33 assessors. In the main, these were drawn from private provider and TAFE/community providers. While this response is small, most of the data reported is supported by comments within focus groups.

Survey design

The survey design was informed by the associated literature survey and by preliminary discussions with other researchers. The questions were framed to test hypotheses and to confirm findings from previous research.

Two survey forms were developed, one for course co-ordinators and the other for assessors. The first survey addressed the qualifications and experience of assessors and asked assessment system questions at the course co-ordinator level. At the assessor level, more detailed questions were asked about the nature and structure of assessments at diploma and advanced diploma levels. The questions used are provided in the appendix.

Initially, registered training organisations were contacted at administration level, then course co-ordinator level (where this existed) and then at the assessor level. The survey questions were piloted with a small group of RTO representatives and adjusted on the basis of their comments. The survey outcomes have been reported in terms of responses from course co-ordinators and separately from assessors.

Responses: Course co-ordinators

Responses were received from 28 course co-ordinators covering the nominated seven training packages as well as other training packages. Some co-ordinators manage the training for more than one training package and answered in terms of all the training packages managed.

Table 4: Number of RTOs by training package (n=28)

Training package	No. of RTOs
Community Services (CHC99)	10
Tourism (THT98)	2
Engineering (MEM98)	1
Finance/Financial Services	7
Agriculture (RUA98)	5
Telecommunications (ICT97)	1
Extractive Industry (MNQ98)	1
Other training packages assessed	
(a) in addition to the 7 above	2
(b) separate from above	4

Policies and procedures

The organisations are using a mixture of policies and procedures. Less than one-third have separate policies for higher level qualifications, and few have special appeals procedures.

Table 5: RTO policies and procedures for higher level assessments

Type of policy/procedure	No. of responses (n=28)		
	Yes	No	No response
Separate policy for assessments at diploma/advanced diploma levels	7	16	5
Special appeals procedures for diploma/advanced diploma	2	21	5

More common were specific assessment arrangements, with over two-thirds of respondents having special instructions for assessors, assessment tools ready for use and/or specific quality assurance approaches at diploma/advanced diploma levels. Few had all three aids. About one-third use assessment panels for all qualifications, and another third use them in some qualifications.

Table 6: Assessment arrangements by number of responses

Assessment arrangements	No. of responses (n=28)			
	All qualifications	Some qualifications	No qualifications	No response
Special instructions for assessors at diploma/ advanced diploma levels	14	0	7	7
Assessment tools ready for use	13	8	2	5
Specific quality assurance approaches for diploma/ advanced diploma levels	12	3	5	8
Use assessment panels rather than single assessor	7	6	8	7

Assessment activities

About 25% of respondents had not completed an assessment at these levels in the past 12 months. About one-half had completed between one and 100 assessments, with the remainder completing more than 100 up to high numbers.

Table 7: Number of course co-ordinators by volume of assessment events (n=28)

0	1–20	21–40	41–60	61–80	81–100	>100
7	5	3	3	2	nil	8

In the set of repondents there is a clear separation between those providers conducting no, or a small percentage of, recognition of prior learning/recognition of current competency (RPL/RCC) assessments, and those with 50% or more. The low percentages were from a mix of TAFE and private providers of all sizes. A few registered training organisations are conducting high percentages of RPL/RCC in their assessment activities. These were smaller providers, with the majority being registered for the Community Services Training Package. Three RTOs did not provide information.

Table 8: Incidence of RPL/RCC activity as a percentage of all assessments

	% RPL/RCC	Volume of all assessments	No. of RTOs in category
High percentage RPL/RCC	60 to 100	5 to 100	6
Low percentage RPL/RCC	0 to 20	5 to very large	17
No information provided			5

Note: This sample includes a significant number of small providers.

Table 9: Number of course co-ordinators by percentage of assessment events being RPL/RCC (n=28)

No response	0	1–20	21–40	41–60	61–80	81–99
3	9	11	0	2	2	1

Equally, there is a separation of providers between a smaller number that collaborated mainly with industry for assessments, and a larger number where collaboration percentage was low. Most government providers recorded a lower collaboration percentage with industry. They are more likely to train school leavers or unemployed people and have the facilities for simulated assessments.

Assessor qualifications and experience

The majority of assessors working at diploma/advanced diploma levels hold either the three assessment units BSZ401A to BSZ403A, being the minimum qualification for assessors in most training packages, or the Certificate IV in Assessment and Workplace Training that includes those three units. A small percentage of registered training organisations require their assessor to hold teaching qualifications.

A small percentage then assign these assessors live assessments without supervision. A larger percentage supervises inexperienced assessors. Only one-quarter of RTOs have rules requiring defined assessment experience prior to working at diploma and advanced diploma levels.

Table 10: Number of responses by type of training (n=28)

Type of training	No. of responses
Certificate IV/BSZ401A to BSZ403A (see note)	17
BSZ401A to BSZ403A plus in-house training	1
Teacher trained (may not be assessment training)	3
Certificate IV minimum/diploma preferred	1
Dip. Education/teaching plus workplace assessor	1
Certificate IV part time, diploma/degree full time	2
Not stated or other	3

Note: The three assessment units BSZ401A to BSZ403A which form part of the Certificate IV in Assessment and Workplace Training are the normal minimum qualification requirement by an assessor.

The registered training organisation rules for industry qualifications and experience are often more demanding. Most RTOs require an appropriate industry qualification at least to the level being assessed. However, about 10% did not require any industry qualifications. Nearly all registered training organisations require industry experience, although the length of required experience varies up to five years.

Availability of assessors

About 25% of the registered training organisations reported some difficulty in obtaining suitably qualified and experienced assessors—one RTO reporting that this difficulty had hindered its growth.

Responses to the survey: Assessors

Responses were received from 33 assessors covering the nominated training packages as well as several others.

Table 11: Number of assessors by training package

Training package (n=33)	No. of assessors
Community Services (CHC99)	9
Tourism (THT98)	4
Engineering (MEM98)	1
Finance/Financial Services	5
Agriculture (RUA98)	9
Telecommunications (ICT97)	0
Extractive Industry (MNQ98)	2
Other training packages assessed	
(a) in addition to the 7 above	6
(b) separate from above	6

The assessors responded in terms of the training packages included in their assessments. There were three types of responses:

- where the assessor worked with one of the nominated seven training packages
- where the assessor worked with one of the seven nominated training packages as well as other training packages
- where the assessor worked with a training package other than the seven nominated.

Assessment methods used

The assessors were asked to nominate their five most frequently used assessment methods from a range listed. Table 12 shows the responses.

Table 12: Number of responses by assessment method

Assessment methods provided in survey list	No. of responses n=33
Observation—work activities	18
Observation—work products	14
Review of log-books and diaries	13
Simulation of work activities	13
Projects	21
Case studies	11
Oral questions—knowledge	13
Oral questions—work/performance	10
Short written answers (less than paragraph)	14
Longer written responses	18
Review of candidates work; for example, report, calculations	18

The assessors were given the opportunity to nominate other assessment methods that they frequently used. Eight assessors provided responses listed in table 13.

Table 13: Number of responses by nominated assessment method

Assessment methods inserted by respondents	No. of responses
Self-assessment resources	1
Testimonials	2
360 degree performance reviews	1
Customer feedback	1
Extensive CV	2
Presentation by students (individual and/or group)	4
Short answer computer tests	1

The assessment methods nominated by respondents show that some registered training organisations are using innovative approaches to assessment.

The three training packages that made up the bulk of those surveyed were community services (9), agriculture (9) and finance (5). The results from these three show there are differences in the assessment methods used. Assessors in the Community Services Training Package are more likely to use workplace observation, longer written responses to questions and review of candidates' work methods. In the Finance Training Package, the methods are likely to be simulation, projects, case studies, short and longer written answers and review of a candidate's work. In agriculture, the assessment methods are likely to be observation of work activities and product, review of log-books and diaries, longer written responses and review of other candidates' written work.

Table 14: Comparison of assessment methods in three training packages

Method	Community services	Finance	Agriculture
Observation—work activities	7	–	5
Observation—work products	–	–	4
Log-books, diaries	–	–	4
Simulation	–	3	–
Projects	7	3	–
Case studies	–	3	–
Short written answers	–	3	–
Longer written responses	7	4	5
Review of candidates work; for example, report, calculations	6	3	5

Assessor experience

Assessors were asked to estimate the number of assessments they had completed at the higher levels. About half had completed more than 50 assessments, about 25% more than ten and 25% less than ten.

Table 15: Responses by number of assessments

Number of assessments	No. of responses (n=33)
Less than 10	7
11 to 50	8
More than 50	17
No response	1

Thus the responses mainly came from people with a reasonable amount of experience in assessment at diploma and advanced diploma levels.

Interpretation of competency standards

The assessors were asked about what ambiguity, if any, they perceived in the training package competency standards. These questions were asked following some significant comments in piloting the questionnaire where the respondents highlighted the difficulty in interpreting the exact requirements of the competency standards.

Table 16: Number of responses by level of ambiguity

Level of ambiguity	No. of responses (n=33)
No ambiguity	3
Some ambiguity (up to 10% of competencies)	16
Significant ambiguity (between 10 and 20%)	7
Major ambiguity (more than 20%)	3
No response	4

The majority of respondents perceived some ambiguity in the competency standards, with around 30% perceiving significant ambiguity. The main areas of ambiguity were identified as the performance criteria and evidence guide. Some assessors identified ambiguity in the range of variables. Table 17 summarises the assessor responses, including responses nominating two or three areas.

Table 17: Number of responses by area of ambiguity

Area of ambiguity	No. of responses
Performance criteria	13
Range of variables	7
Evidence guide	10

The intent of the questions was to identify where the respondents saw lack of clarity in the competency standards. Of the 33 assessors, 26 indicated a level of ambiguity and 21 nominated a specific area of ambiguity. Four respondents nominated two areas of ambiguity and three nominated all three areas.

The responses by 33 assessors in six training packages across Australia regarding ambiguity in standards are sufficient to question the validity and reliability of assessments. Given the random selection of the training packages within this research, it would be reasonable to expect assessors working with other training packages to report similar ambiguity.

Role of professional judgement

The assessors were asked about the significance of professional judgement in assessment. Few stated that it had a limited role. About 70% said they needed to use a reasonable, significant or major level of professional judgement.

Table 18: Number of responses by level of professional judgement

Level of professional judgement	No. of responses (n=33)
Limited professional judgement (less than 10%)	4
Reasonable professional judgement (11 to 20%)	12
Significant professional judgement (21 to 30%)	7
Major requirement for professional judgement (over 30%)	5
No response	5

Professional judgement may be taken to include less objective components being applied by assessors during higher level assessments. It is recognised in literature that observation of performance supplemented by questions may not fully explore higher level competencies as these are more complex.

When the competencies and contexts are complex the assessors are likely to find themselves calling up a complex mix of prior workplace or industry experience to judge whether the evidence (performance, knowledge, understanding, values and ethics) demonstrates competent performance.

Is the professional judgement of one assessor the same as another's? Some assessors indicated through the survey that this area of professional judgement is managed by assessment teams and moderation of assessments. Yet, at the same time, it is clear many assessors of higher level competencies are working independently.

What is good practice in managing assessor judgements of higher level competencies? There is a need for additional research in this area.

Training package assessment guidelines

As the training package assessment guidelines were provided to improve assessment quality, the level of their use was surveyed. About 40% of the respondents reported that they use them often, while most of the others do not use them or use them occasionally.

Table 19: Number of responses by stated level of use

Level of use	No. of responses (n=33)
Not used at all	6
Occasionally	6
Sometimes	2
Often	14
No response	5

It appears from these responses and other comments made during interviews that the guidelines are often considered as a reference document only. There is need for further research into the limited use being made of the training package assessment guidelines.

Customisation of assessment events

Most respondents customised their assessment process for up to 30% of assessment events. Assessors working in institutions could be expected to use lower levels of customisation because of more standardised processes (for example, the use of standard assessment tasks). Several respondents indicated that this was the reason for their low level of customisation.

Table 20: Number of responses by percentage of assessment events customised

Percentage of assessment events adjusted	No. of responses (n=33)
Not at all	6
For up to 30% of assessment events	19
For 30% to 70% of assessment events	4
For more than 70% of assessment events	1
No response	3

The researchers had expected that workplace assessments would be subject to more negotiation and customisation. The earlier responses on assessment methods indicate that many are based on actual or simulated workplaces. Thus customisation may not be happening as much as could be anticipated.

Exploration of underpinning knowledge

Assessors were asked to estimate the proportion of assessment time that is devoted to exploring underpinning knowledge. The answers varied from little to most of the assessment. The biggest proportion of answers—that is, about 36% of answers—was between 20% and 40% of the assessment time, although the answers were spread across all possible responses.

Table 21: Number of responses by proportion of assessment time

Proportion of assessment time	No. of responses (n=33)
Less than 20% of the time	8
Between 20% and 40% of the time	12
Between 40% and 60% of the time	6
More than 60% of the time	4
No response	3

This question was considered important, given the amount of research material discussing the place of underpinning knowledge. It appears that most assessors are addressing underpinning knowledge. A minority might not be addressing it sufficiently, while some others might be too focussed on it and giving inadequate attention to performance of workplace skills.

Comparisons with certificate IV assessments

Assessors were asked to compare the diploma and advanced diploma assessments against certificate IV assessments in relation to complexity, time commitment, demands on assessor skills and the resources requirements. Generally the responses indicated that the higher level assessments:

- are more complex (over 90% of responses)
- take more time (over 90% of responses)

- require higher levels of assessor skills and experience—this again may vary according to the assessment (over 60% said more assessor skills and experience are required)
- may take varying resources to those required for certificate IV, often taking more—these answers seem to be based on the type of unit and assessment method (over 70% said more resources are required).

Consultations

Introduction

The survey results were provided as the basis for discussion with two focus groups totalling 25 people, as well as a group of 25 researchers at an NCVER conference and 12 individual stakeholders and VET clients. The membership of the focus groups largely consisted of experienced VET trainers, assessors and managers. In addition, extensive comments were received from participants in the surveys.

The comments from the three types of consultation—the survey, focus groups and individual interviews—are consolidated here by topic or issue.

VET client reaction

Two larger organisations, which are clients of the VET sector and were part of the consultations, responded with general comments on the assessment of higher qualifications and assessment in general.

One organisation uses external providers as well as internal workplace assessors. It has restrictions on the workplace assessors assessing at the higher levels. Assessments at diploma level are completed by workplace assessors under direct supervision of the central training and education group. Workplace assessors do not conduct advanced diploma assessments. These restrictions apply because there are concerns about the complex nature of the higher level assessments, given the level of training and experience that workplace assessors have undertaken.

The other organisation uses registered training organisations to provide training and assessment for training package qualifications up to advanced diploma. Recently, it has contracted a number of RTOs to complete programs that are largely recognition of current competency based, with additional training to address gaps. Supervising personnel have expressed some concerns about the adequacy of the assessment approaches being used by RTO staff who are completing assessments from certificate III level to advanced diploma.

While the organisations had specific concerns about assessment practices at higher levels, their comments are part of a wider concern about the overall quality of workplace assessment. This includes the level of the initial assessment training, maintenance of the competencies of workplace assessors, and the quality and assessment systems of RTOs.

Focus groups

Those attending the two focus groups and the conference presentation were invited to comment on a summary of the quantitative survey findings. In addition, participants at one of the sessions were invited to provide written comments. Some of these comments were substantial.

Areas of concern

Competency standards

Participants in the survey and focus groups largely concurred that there was significant ambiguity in the competency standards that they worked with. At the same time, some have commented that it is impossible to eliminate ambiguity. However, the current training packages were seen as better than the many versions of curriculum that were used previously.

The main areas identified as ambiguous in both the survey and the focus groups were the performance criteria and the evidence guides. A smaller number referred to ambiguity in the range of variables.

In general, industry advisory training bodies representatives that have commented on the survey and other research believe that their competency standards are of good quality, and the main issue is the way in which they are being interpreted by users. More research is required in this area.

It is unclear whether the perceived ambiguity was due to inadequacies in the competency standards or to inadequate training of assessors and moderation of their activities. The views on this issue are mixed. Certainly there is widespread belief that the assessors are inadequately trained. Some state that the assessment training providers are often not training and assessing to the existing certificate IV standard. Others believe that the current certificate IV standard is not adequate for more complex assessments. This was the strong opinion of the majority in one focus group.

A smaller group indicated that they believed the competency standards have deficiencies at higher levels where performance criteria are broad and underpinning knowledge is not specific. One person who had been involved in audits of registered training organisations which include higher qualifications has stated that it is difficult when considering some training package qualifications to ensure that the RTO training and assessment meets the competency standards. She believed that extra definition would help.

Another commented that their RTO would not embark on delivery of the Advanced Diploma of Accounting until guidelines are issued that clarify the competencies. Guidelines are already in place for the diploma.

Another group believes that assessors and others are not trained to properly interpret the competency standards.

Policies and procedures

The focus groups had mixed views on the benefit of relevant policies, procedures and other quality assurance mechanisms. These views are summarised below.

- Only a few thought a separate policy for higher level assessment would be useful. This is in line with reported practice in the survey.
- In line with the survey, most thought a separate appeals procedure was not necessary.
- Most of the focus group participants thought special instructions for assessors of higher level qualifications were essential or useful. This was a stronger response than shown by the survey respondents.
- While the survey showed that the responding organisations often prepared standard assessment tools, the focus group participants thought these were useful rather than essential.

- The focus groups strongly supported the use of specific quality assurance approaches for higher level qualifications.
- There was moderate support for the use of assessment panels rather than a single assessor in the focus group and survey.

The majority of respondents in this research have obviously considered the maintenance of quality in higher level assessments. Exactly which approach is more effective is not clear.

Current assessor qualifications

As indicated above, current assessor qualifications are one of the more contentious areas to come from the research. There is widespread comment that the Certificate IV in Assessment and Workplace Training (and its predecessors) does not equip assessors with sufficient competencies to manage assessments of higher level, or more complex, competencies. There was a minority opinion that asserted the current level of training and qualification was adequate.

The issues of assessor qualifications seemed to revolve around whether the current training delivery was failing to provide competent assessors or whether the current competency standards were an inadequate basis for the training at the higher levels. The focus group discussions identified both as problems.

There was considerable criticism of the standard of delivery by the providers of assessment training. This was partially based around the reported achievement of the assessment competencies by students in considerably less than the nominal training hours. Others provided a critique of the competencies required by assessors working with diploma and advanced diploma qualifications.

Required assessor competencies

There were many comments about the additional requirements needed by assessors working at the diploma and advanced diploma levels. The comments were diverse and covered most aspects of assessment.

The consultations proposed that the assessors working at higher levels should have the skills to:

- design complex assessment plans and tools, and to adjust them to varying assessment contexts
- apply holistic approaches to assessment
- use a wider range of assessment methods, direct and indirect, both in training related assessments and recognition of prior learning
- apply consulting, presentation, coaching and negotiation skills in managing the diverse assessment contexts
- assess and manage assessment risk
- use networking, moderation and other quality assurance approaches
- deal with a broader knowledge base as specified in the competency standards
- apply theory of how people learn, synthesise, evaluate and make judgements.

Assessment methods

The focus groups were asked to comment on the assessment methods recorded in the survey. Some were critical of the large number of responses indicating the use of longer written answers to questions. This was seen as a continuation of old practices.

In another focus group, the members of whom were assessors, when asked to identify the five methods most frequently used by them nominated very similar methods to those identified in the quantitative research, namely observation of work activities and work products, projects, review of log-books and diaries. The focus group placed emphasis on the appropriate method for the competencies and the associated underpinning knowledge.

The focus groups and others saw the role of underpinning knowledge as context-sensitive with different industries valuing it differently. For example, the engineering areas require knowledge of facts, and codes and standards of practice that are critical to competent performance. In management, the knowledge requirement was less well defined.

Professional judgement

The place of professional judgement within an assessment was discussed. One focus group asserted that the use of professional judgement in assessment should be viewed as a positive, whereas others saw dangers in relying on it.

Some participants stated that a recognition of prior learning assessment always requires higher levels of professional judgement. There was a lower level of consensus on other assessments. Furthermore, it was pointed out that if professional judgement is the basis for a large portion of the assessment, and the candidate appeals, there are fewer concrete facts on which to determine the appeal. In many cases, a second assessment would be required to achieve fairness.

Underpinning knowledge

Assessment of underpinning knowledge was considered to vary between every qualification and some referred to differences between units—that is, for some areas the knowledge required related to a science, in others knowledge of legislation was important, and in others knowledge of processes and practices was necessary. The evidence guide and the range of variables were identified as not being very clear in some training packages. An example was given where 'managing pests' included 55 different types of pest, with no indication of how many of these different types needed to be assessed before the candidate was deemed competent.

Comparison: Diploma and advanced diploma

There were several comments that the advanced diploma is more complex than the diploma and, in some ways, different. For example, in the Community Services Training Package, the diplomas are for senior operational functions and the advanced diploma covers the management of a community services organisation. This pattern is similar in the Tourism Training Package.

There is no evidence that the approach for assessment at the advanced diploma levels should be markedly different for the diploma level, other than comments that the underpinning knowledge component is more extensive.

Overview of outcomes from focus groups and other consultations

The consultations had several strong themes.

- Discussion in the focus groups and the interviews generally validated the results of the survey. In particular, there are similar views on various inadequacies related to assessor qualifications and experience, quality assurance measures, and assessment methods that are being used.
- There are concerns about the perceived ambiguity in the competency standards. The quality and standard of the assessment training delivered as part of the Certificate IV in Assessment and Workplace Training is questioned, especially for complex assessments.
- One focus group differed from other consultations in asserting that a high level of professional judgement was not seen as necessarily bad, and essential in some forms of higher level assessment.

Findings and conclusions

The findings and conclusions are divided into the primary areas of research as indicated by the research questions and other important issues that emerged during the research. In addition, future areas of research are identified.

The research questions

What diploma and advanced diploma qualifications have been included in training packages?

Most training packages contain at least one diploma qualification, with an average of about three higher level qualifications per training package. About half of the training packages contain at least one. Those that have advanced diplomas average three qualifications.

The numbers of these higher level qualifications are increasing with the development of new training packages and the review of existing packages. The numbers grew about 8% between August 2000 and January 2001.

The numbers of students enrolling in these qualifications are rapidly increasing as registered training organisations change to the newer training packages from older qualifications. Based on 2000 VET statistics (NCVER 2001), it could be expected that the numbers enrolled will exceed 100 000 in 2002.

People who obtain these qualifications are often current or potential occupants of middle level to upper level managerial or technical positions in organisations. Many proceed to higher education or additional VET qualifications. The standard of diploma and advanced diploma graduates is recognised as being important to many employers and, hence, to the economy overall.

What is the nature of the skills and knowledge specified in these qualifications?

The skills and knowledge included in the higher level qualifications reviewed fall into the following categories:

- generic industry competencies at the higher Australian Qualifications Framework level
- supervision and management skills, which may be more strategic at advanced diploma and more operational at diploma level.

The 'technical' competencies associated with the performance of a non-management role within the industry are often associated with complex conceptual, creative, planning, managerial and complex administrative functions. Some of these positions may have complex roles associated with management or complying with legislation—for example, occupational health and safety legislation.

Other than for units describing enabling or industry generic units (and often required as core units for a qualification), more complex skills and knowledge are the norm. The key units that seem to contain the important aspects of the higher levels of competencies are those which describe the 'technical' and managerial functions.

There are complex competencies that describe generic skills applicable to more than one training package or industry, and other more specific units that describe a mix of technical and/or managerial skills appropriate to that industry or sector within the industry. This is clearly apparent where some units in a qualification have been sourced from another training package; for example, the frontline management units which have been included partially or fully in a number of other training packages.

The impact of workplace contexts on performance varies within and between training packages. For example, the training of higher level graduates in the Children's Services stream of the Community Services Training Package has a significant concentration on relationships with children and their families. The Diploma in Engineering equips graduates to perform a wide range of functions across a range of industries, depending on the training undertaken. Thus diplomas and advanced diplomas from different industry sectors vary in their purpose and scope.

Development of quality assessments at higher levels requires that the assessment plans and processes should be strongly customised to cater for wide variations in workplace and industry contexts. This strong customisation is not apparent in the training package assessment guidelines.

Few of the assessment guidelines address issues associated with higher level qualifications at all. This is reflected in the limited use of the guidelines by assessors. Training package developers need to provide more advice about assessment at higher levels.

What assessment issues specific to these qualifications have been addressed in the registered training organisations' assessment approach?

As shown in table 22, some significant differences have been identified throughout the research.

Assessment issues have been recognised by many of the participants in the research as being significant. In fact, some have not proceeded with assessments at higher levels because of the difficulties in dealing with specific workplace issues and/or the unavailability of suitably qualified and experienced assessors.

Some course co-ordinators in the registered training organisations surveyed commented on the challenges of the delivery and assessment of a diploma or advanced diploma from a training package. The challenges reported were:

- changing from the traditional vocational course at this level, resulting not only in a change in assessment requirements but also a substantially changed delivery approach that has involved additional cost and time commitments
- development of staff managing training and assessments to appropriately address the requirements of the training packages and qualifications
- availability of, or development of, suitably qualified assessors in light of the poor record of current assessor training courses
- installation of relevant quality assurance procedures.

Table 22: Comparison—competency standards and assessments at certificate and diploma levels

Characteristic	Certificate levels	Diploma levels
Competency standards:		
Knowledge and understanding	Limited to moderate depth	Depth and/or breadth required
Range of contexts	Limited	May be diverse
Complexity	None to some complexity	May be substantial, especially at advanced diploma level
Assessments:		
Customisation of assessments	Limited	Limited in institutional setting, may be diverse in workplace
Assessment methods	Generally based around observed performance	Performance less observable, indirect methods often required
Assessment planning	Met by current standards	Can be quite complex
Assessment skills required	Met by current standards	Requirements often exceed current standards
Resources and time	Generally well controlled	May be significantly more than for certificate levels
Assessor professional judgement	Generally limited range of evidence	May involve judgement of diverse indirect evidence and considerable inference
Interpretation of competency standards	Limited comment, extent of any problems unknown	Identified as a significant problem, major issue
Use of assessment guidelines	Unknown	Low-to-moderate use

The research indicates that the implementation of quality assurance procedures within registered training organisations is variable. Moderation procedures between assessors are widely promoted by ANTA and the state training authorities, but only a few indicated that this was part of formal RTO procedures.

The impression gained from the responses was that the registered training organisations' approaches to assessment varied from constructing a significant set of procedures and processes to manage assessments at higher levels, to situations where the major decision was to limit these assessments to one person or a small group of persons. The latter approach, more common with smaller providers, centred on selecting the appropriate person(s) rather than a documented framework.

A few registered training organisations have developed assessment plans and/or standard instruments for assessment at higher levels. Table 6 shows less than 50% of RTOs in the survey had assessment tools ready for use. Some providers see dangers in standard assessment documentation because of the variable nature of assessment requirements.

The lack of overall consistency and quality of assessment outcomes is clearly an issue within individual providers and between providers. Associated with this issue is widespread concern about the current perceived low standard of assessor training.

How have the complex skills in these qualifications been assessed?

The complex skills in diploma and advanced diploma qualifications reflect the more varied, less routine, less specific tasks and duties in higher level work. Typical competencies might include strategic planning, case management, critical thinking, evaluation of processes and programs, problem solving and decision making. The impact on the assessment, compared with assessments at certificate levels, may be:

- more time to gather the evidence on which to make an assessment

- more indirect assessment
- greater customisation of the assessment
- that the assessor is required to use considerable professional judgement.

There was concern among those consulted that current training for assessors working at higher levels was not equipping them to use appropriate assessment approaches or to manage the risks inherent in the assessments.

Assessment methods being used reflect the fact that many higher level competencies are less readily observed. Most registered training organisations are using well-documented standard assessment methods. Some are using more innovative approaches, such as self-assessment, peer assessment, and computer-based testing. The impression gained from interviews and the focus groups is that indirect evidence (for example, tests of knowledge and portfolios of work) feature more prominently in higher level assessments.

The survey provided evidence that common assessment methods are:

- projects
- observation of work activities and review of candidates' work
- longer written responses.

Workplace-based evidence is more prominent than simulation in most training packages. However, the providers working with the finance industry training packages use a larger proportion of simulation.

While all providers reported that they use a range of assessment methods, it was less clear as to how the assessments are structured to manage risk in order to ensure reliability.

The respondents reported in the survey and through consultations that the cost of assessment is limiting the time and resources being used. Limiting the time and resources spent on higher level assessments may reduce the validity and reliability of these assessments. This is an area where research at training provider level into the cost of alternative assessment methods is required.

There appears to be potential weakness in the competency standards at diploma and advanced diploma levels. There is little detailed guidance within most training packages as to what is sufficient evidence for competence to be demonstrated. Associated with this is the significant reliance by many registered training organisations on the professional judgement of the assessor as to the quality and sufficiency of evidence.

How has the underpinning knowledge and application of underpinning knowledge been assessed?

The data from the survey and the consultations indicate that there are two ways in which underpinning knowledge is being assessed, namely:

- through the use of traditional testing methods, such as the setting of written papers, assignments and oral questioning—this seems to be used mainly within the context of formal training
- through inference during assessment of performance—this is used as part of formal training as well as part of skills recognition processes.

Inference in this context means the assessor inferring that the candidate has underpinning knowledge based on observed performance. Using only inference as a method of assessing knowledge at higher levels is a dubious practice.

The emphasis by some providers is on performance, with underpinning knowledge being a secondary consideration. This may flow from the structure of the competency standards where the clear emphasis is on performance. There is considerable comment from a range of sources that the level of underpinning knowledge in some training packages is lower than previous courses.

Research literature places emphasis on the need for underpinning knowledge as the key to performance in widely varying contexts, especially at professional levels. Underpinning knowledge is primarily being assessed using traditional oral and written methods, or through inference from performance. A small percentage of providers are using alternative assessment methods such as self-assessment resources, customer feedback, and presentations by students (individual and group). The perceived variable quality in assessment of unpinning knowledge was the subject of comments in focus groups and interviews. The training package assessment materials guidance provides limited comment about underpinning knowledge.

There seems to be tension about the extent of underpinning knowledge in higher level qualifications, with some placing high value on it, while others seeming to give it a limited role under performance. The real issue is the level of resources given to a candidate to address the expected range of work roles and to appropriately resource contingency management and role/environment management skills.

The overall conclusion reached is that insufficient attention is being given to the identification, delivery and assessment of underpinning knowledge within diploma and advanced diploma qualifications. Graduates at the diploma and advanced diploma levels are expected to work in varied roles and to research, initiate, create, manage others and resources, and to review and evaluate. These competencies require a sound base of knowledge and understanding. More research and development work is needed in this area.

How have the assessment approaches, issues encountered and solutions impacted on the quality of outcomes?

While the majority of assessments at diploma and advanced diploma levels seem to be of reasonable quality, the assessment policies and procedures of most providers are less than that expected in the Australian Quality Training Framework. There are examples of demanding quality approaches to assessment at these levels. For example, one provider delivering a diploma level qualification within the Community Services Training Package has built a set of procedures and resources, trained a group of assessors in their use, established a moderation group, and implemented review procedures.

While there are questions as to the ambiguity perceived by assessors in the competency standards, there are areas of content that training package developers could address to improve the quality of training and assessment at higher levels. For example, the assessment guidelines of the agriculture and community services training packages address specific issues which are present in their higher level qualifications.

There are some providers using people with minimum assessment training and limited assessment experience. There is greater emphasis on quality in industry-based qualifications, and other providers are applying minimal standards in their assessment procedures.

Assessments at these levels are complex. The assessment training at certificate IV level does not address these complex issues in any depth, and training at the diploma level is oriented towards assessment systems and procedures. Thus many assessors have learned on the job ways in which to approach and manage the complex assessment.

Many assessors at these levels have higher education qualifications and industry training at higher levels, and have an understanding of the complexity of practice from this training and

their industry experience. It appears from the survey and consultations that many assessors are addressing the assessment issues using their professional judgement that is based on their experience.

However, this exercise of professional judgement does not necessarily lead to quality outcomes. While many assessments at this level may have a solid basis for the assessment decision, we believe there are others where the quality of the decision is doubtful.

The survey responses, the interviews and the focus groups all point to a probability that there are assessments of questionable quality. There is significant responsibility being borne by individual trainers and assessors for the quality of the outcomes.

What are the specific assessment skills required for assessors completing assessments at Australian Qualifications Framework levels 5 and 6?

There was overall support for the view that assessors require a mix of higher level industry competencies as well as higher level assessment skills.

The responses indicate the assessors required skills and knowledge that include:

- the skills to develop an assessment approach which is considered holistic or integrated, including:
  - development of an assessment plan across a unit or group of units:
    - matching and combining evidence of performance
    - development of a diverse range of assessment methods that are inclusive of the hidden and observable dimensions of performance ('hidden' dimensions include creativity, analysis and decision making, all of which are reflected in observed actions)
    - ability to formulate an understanding of the dimensions of competency from the standards and networking with others
    - possession of strong negotiation and consulting skills to develop customised assessment procedures to suit the different assessment contexts
- the knowledge of learning and assessment theory, such as an understanding of:
  - alternative learning styles and associated cognitive theory
  - ethics, values, and attitudes that may be a component of performance
  - patterns of communication, problem solving and judgement that a practitioner might use in the industry
  - the relationship between underpinning knowledge and performance at higher levels
  - the range of contexts from which performance should be sampled.

These dimensions provide a basis for an improved assessor professional development program for conducting assessments at diploma and advanced diploma levels.

Other issues

Number of registered training organisations delivering training

An examination of the National Training Information System reveals that although the number of training providers registered to deliver diplomas and advanced diplomas is large, only about 40% of our sample are actually delivering training and/or assessment services.

This raises an issue for the state and territory training authorities as to whether the scope of some registrations should be adjusted.

A proportion of these registered training organisations are providing a few services at the diploma and advanced diploma levels, often in conjunction with services for lower level qualifications within the same training package.

Smaller registered training organisations are more likely to be offering only skills recognition services. These services require less training provider resources but have a larger risk associated with them, especially where full qualifications are being issued to successful candidates. It was interesting to note that some providers, who were mainly larger providers, are not delivering any skills recognition within their training services for higher level qualifications.

It would appear that the mix of larger and smaller providers is delivering a range of training and assessment services within the construct of the relevant training package. This would seem to be meeting the intent of the training market.

Areas for future research

This research was designed to investigate the nature of assessment issues at diploma and advanced diploma levels, and to point to solutions. The research has identified areas for more detailed and in-depth analysis that could be the subject of future research. The research questions identified follow:

- What changes need to be made to the descriptions within higher level units of competency in order to improve the quality of assessment?
- What are higher level generic competencies and how might they be identified and incorporated within training packages?
- What special features should be included in training and assessment systems to manage the training and assessments of higher level qualifications?
- What risk management strategies should be applied with assessments at higher levels?
- What are appropriate self-assessment and peer assessment systems and methods for use in training packages?
- What are the cost advantages/disadvantages of different assessment methods at higher levels?
- How appropriate is the provision of standard assessment instruments at higher levels (given the increased diversity of workplace performance)?
- What is best practice in the measurement of attitudes, ethics and values within higher level qualifications?

References

AQF (Australian Qualifications Framework) Advisory Board 1996, *Australian Qualifications Framework implementation handbook*, 1st edn, AQF Advisory Board, Melbourne.

—— 1998, *Australian Qualifications Framework implementation handbook*, 2nd edn, AQF Advisory Board, Melbourne.

ANTA (Australian National Training Authority) 1998a, *Training package for assessment and workplace training*, ANTA and Business Services Training Australia (joint), Melbourne.

—— 1998b, *Updated guidelines for training package developers*, ANTA, Melbourne.

—— 2001, *Training package development handbook*, ANTA, Melbourne.

Bloch, B 1993, *Costing testing in testing times*, National Centre for Vocational Education Research, Adelaide.

Booker, D 1995, *Assessment of knowledge and understanding in areas of complex work*, report for Arts Training Australia, D Booker, Adelaide.

Boorman, A 2002, *How institutions respond to training packages* (in press), ANTA, Brisbane.

Department of Defence 2000, *Department of Defence registered training organisation assessment kit*, version 4, July, Department of Defence, Canberra.

Down, C 2001, 'Training packages and underpinning knowledge: Getting our heads round the issues', paper presented to the 10th National Vocational Education and Training Research Conference, 10–13 July, Geelong, NCVER, Adelaide.

Dumbrell, T, de Montfort, R & Finnegan, W 2001, *Outcomes for VET diploma and associate diploma students*, NCVER, Adelaide.

Eraut, M 1990, 'Identifying the knowledge which underpins performance', in *Knowledge and competence, current issues in training and education*, eds H Black and A Wolf, Employment Department, London.

—— 1994, *Developing professional knowledge and competence*, The Falmer Press, London.

Gonczi, A, Hager, P & Oliver, L 1990, *Establishing competency-based standards in the professions*, Australian Government Publishing service, Canberra.

Hager, P 1993, *Conceptions of competence*, <www.ed.uiuc.edu/EPS/PES-Yearbook/93_docs/HAGER.HTM> [accessed: December 2001]

—— 1995, 'Assessment of knowledge, attitudes and values', in *Key aspects of competency-based training*, ed. WH Hall, NCVER, Adelaide.

—— 1999, *Know-how and workplace practical judgement*, working paper no. 99.01, Research Centre for Vocational Education and Training, Sydney.

—— & Beckett, D 1999, 'Making judgements as the basis for workplace learning—preliminary research findings', in *Quality and diversity in VET research*, proceedings of the second national conference of AVETRA, AVETRA, Sydney, pp.175–84.

—— & Gillis, S 1995, 'Assessment at higher levels', in *Key aspects of competency-based training*, ed. WH Hall, NCVER, Adelaide.

Hawke, G & Griffin, P 1995, 'Self-assessment and peer-assessment', *Key aspects of competency-based training*, ed. WH Hall, NCVER, Adelaide.

Heywood, L, Gonczi, A & Hager, P 1992, *A guide to the development of competency standards in the professions*, AGPS, Canberra.

Jessup, G 1991, *Outcomes, NVQs and the emerging model of education and training*, The Falmer Press, London.

Johnstone, I & Evans, G 2001, 'Assessing competencies in higher qualifications', in *Training package assessment materials project*, Department of Education, Training and Youth Affairs, Canberra.

Mansfield, B & Mitchell, L 1988, *The identification of underpinning knowledge: Guidance on the use of the 'knowledge' flow chart*, Barbara Shelborn Developments Ltd, UK.

Mansfield, B 1990, 'Knowledge, evidence and assessment', in *Knowledge and competence, current issues in training and education*, eds H Black and A Wolf, Employment Department, London.

Masters, G & McCurry, D 1990, *Competency-based assessment in the professions*, AGPS, Canberra.

Mitchell, L & Bartram, D 1994, *The place of knowledge and understanding in the development of national vocational qualifications and Scottish vocational qualifications*, briefing series no.10, Employment Department, Sheffield.

Muhlhan, B 1995, 'A collaborative investigation into the forces that support supervisor training and development in a large manufacturing environment using action research', M.Ed thesis, Southern Cross University, New South Wales.

National Training Board 1990, *Setting national skill standards*, National Training Board, Canberra.

—— 1991, *National competency standards: Policy and guidelines*, NTB, Canberra.

—— 1992, *National competency standards: Policy and guidelines*, NTB, Canberra.

NCVER (National Centre for Vocational Education Research) 2001, *Australian vocational education and training statistics 2000: At a glance*, NCVER, Adelaide.

Senate Employment, Workplace Relations, Small Business and Education References Committee 2000, *Aspiring to excellence: Report into the quality of vocational education and training in Australia*, Australian Parliament, Canberra.

Standards & Curriculum Council 1996, *Standards best practice manual*, ANTA, Brisbane.

VETASSESS (Vocational Education and Training Assessment Services) 2000, *VETASSESS News*, vol.4, no.2, 2 July, VETASSESS, Melbourne.

Wolf, A 1990, 'Unwrapping knowledge and understanding from standards of competence, in *Knowledge and competence, current issues in training and education*, eds H Black and A Wolf, Employment Department, London.

Appendix: Surveys—Assessment at diploma/advanced diploma levels

SURVEY - ASSESSMENT AT DIPLOMA/ADVANCED DIPLOMA LEVELS

QUESTIONS FOR ASSESSORS

Name of assessor	
Organisation Name	
Department or School (if applicable)	
Address	
Telephone Number	
e-mail address	

Assessment at Diploma/Advanced Diploma levels in specific Training Packages

1. Does your organisation conduct assessments at diploma/advanced diploma levels in any of the following Training Packages? (please tick)

Community Services (CHC99)	___	Agriculture (RUA98)	___
Tourism (THT98)	___	Telecommunications (ICT97)	___
Rubber, Plastics & Cablemaking (PMB98)	___	Extractive Industry (MNQ98)	___
Finance (FNA99)/ Financial Services (FNB00)	___	Other Training Packages (please list details at question 12)	___

Assessment Methods/Experience

2. Please tick the five most used assessment methods from the list below for the diploma and advanced diploma qualifications. Add other methods if they are frequently used.

Observation-work activities	___	Short written answers (less than paragraph)	___
Observation-work products	___	Longer written responses	___
Review of log-books and diaries	___	Review of candidates work eg report, calculations etc.	___
Simulation of work activities	___	Other, please list	
Projects	___	_____	
Case studies	___	_____	
Oral questions - knowledge	___	_____	
Oral questions - work practices/performance	___		

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3. Approximately how many assessments have you completed at diploma/advanced diploma levels (please tick)
less than 10 ___ 11 to 50 _____ more than 50 ____

Questions about the assessments

4. How clear are the competency standards and supporting documentation in specifying the competency requirements for the diploma and advanced diploma?
No ambiguity ___ Some ambiguity (up to 10% of competencies) ___ Significant ambiguity (between 10 and 20%) ___ Major ambiguity (more than 20%) ___
Please identify which area(s) of the competency standards are ambiguous. (please tick)
Performance criteria ___ Range statement ___ Evidence guide ___

5. Estimate what proportion of your assessment decisions for the diploma and advanced diploma is based on professional judgement rather than specific workplace outcomes. (Professional judgement is required where industry experience or subject knowledge is required to assess a specific performance and there could be difference between assessors)
Limited professional judgement (less that 10%) ___ Reasonable professional judgement (11 to 20%) ___ Significant professional judgement (21% to 30%) ___ Major requirement for professional judgement (more than 30%) ___

6. What direct use or reference is made of the Training Package assessment guidelines and assessment materials during an assessment event?
Not used at all ___ Occasionally ___ Sometimes ___ Often ___

7. What percents of assessment events do you have to change the assessment processes (ie projects, observations, questions) to cater for the candidate's work environment or similar reasons?
Not at all ___ For up to 30% of assessment events ___ For 30% to 70% of assessment events ___ For more than 70% of assessment events ___

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6. What proportion of your assessment time do you devote to exploring underpinning knowledge?

Less than 20% of the time ___ Between 20% and 40% of the time ___

Between 40% and 60 % of the time ___ More than 60% of the time ___

9. Have you conducted assessments for Certificate IV units?

Yes ___ go to question 10

No ___ go to question 12

Comparisons between Certificate IV and Diploma level assessments

10. What are the differences (if any) in the assessment processes, time and resources you have conducted at diploma/advanced diploma levels from assessments at certificate level?

Assessment processes for diploma/advanced diploma levels are:

The same ___ Slightly more complex ___ Significantly more complex ___

The time taken for diploma/advanced diploma assessment is:

The same ___ Slightly more time ___ Significantly more time _

The assessor/assessment team skills and experience required are:

The same ___

Not the same because some extra skills and experience are required ___

Considerably more skills and experience are required ___

The resources (ie people, equipment, materials) required are:

The same ___ Up to 1/3 extra ___ More than 1/3 extra ___

11. What extra skills and knowledge and techniques (if any) have you used in assessments at diploma/advanced diploma levels, but have not been needed at certificate levels? (please describe)

_____

_____

_____

_____

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12. Other comments about assessments at diploma/advanced diploma levels (please insert information about other Training Packages here)

Copy of Report

Would you like a copy of the report summarising the responses to this survey? (please circle)

Yes / No

Please return the completed survey by .....to:

email: djfa@camtech.net.au or pdavis@chariot.net.au

fax: (08) 8296 1731

mail: David J Foreman & Associates, 122 Davenport Tce, Seacliff Park, SA, 5049

SURVEY - ASSESSMENT AT DIPLOMA/ADVANCED DIPLOMA LEVELS

QUESTIONS FOR COURSE COORDINATORS

Name of person completing this survey	
Organisation Name	
Department or School (if applicable)	
Address	
Telephone Number	
e-mail address	

Assessment at Diploma/Advanced Diploma levels in specific Training Packages

1. Does your organisation conduct assessments at diploma/advanced diploma levels in any of the following Training Packages? (please tick)

Community Services (CHC99)	___	Agriculture (RUA98)	___
Tourism (THT98)	___	Telecommunications (ICT97)	___
Rubber, Plastics & Cablemaking (PMB98)	___	Extractive Industry (MNQ98)	___
Finance (FNA99)/ Financial Services (FNB00)	___	Other Training Packages (please list details at question 6)	___

Special Procedures for Assessment

2. We are interested in your special or specific arrangements for assessments at diploma/advanced diploma levels. Please indicate your specific arrangements. (please tick)

A separate policy for assessments at diploma/advanced diploma?	Yes ___ No ___		
Special appeals procedures for diplomas/advanced diplomas?	Yes ___ No ___		
Special instructions for assessors at diploma/advanced diploma levels?	All quals ___	Some quals ___	No qualifications ___
Prepared assessment instruments/tools ready for use for these qualifications?	All quals ___	Some quals ___	No quals ___
Specific quality assurance approaches for diplomas and advanced diplomas?	All quals ___	Some quals ___	No quals ___
Use assessment panels rather than a single assessor?	All quals ___	Some quals ___	No quals ___
Other arrangements, please describe	_____		

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Assessment Activities and Arrangements

3. We are interested in the type of assessment activities and arrangements you have.	
Approximately how many assessment events has your organisation completed at diploma/advanced diploma levels in the past 12 months?	_____
What is the approximate percentage of assessment events that are RPL/RCC?	_____%
What is the approximate percentage of assessment events that are completely collaborative or in partnership with industry employers?	_____%

Assessor Qualifications/Experience

4. What are the minimum requirements you have for assessors working at diploma/advanced diploma levels?

Training in assessment? (please specify) _____

_____

Experience in assessment? (please specify) _____

_____

Industry qualifications? (please specify) _____

_____

Industry experience? (please specify) _____

_____

Has the limited availability of qualified assessors restricted your activities? Yes __ No __

Assessor Contact Details:

5. Please nominate up to three assessors with experience in assessments at Diploma/Advanced Diploma levels to answer a survey of similar length to this survey. Alternatively please advise that you will distribute the survey to the assessors and we will supply a copy of the assessor's survey.

I will distribute the survey to the assessors and collect their responses Yes __ No __

Name _____ email _____

Telephone _____ Facsimile _____

Name _____ email _____

Telephone _____ Facsimile _____

(also next page)

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Name _____ email _____

Telephone _____ Facsimile _____

6. Other comments about assessments at diploma/advanced diploma levels (please insert information about other Training Packages here)

Copy of Report

7. Would you like a copy of the report summarising the responses to this survey? (please tick)
Yes __ No __

Please return the completed survey by .....to:

email: djfa@camtech.net.au or pdavis@chariot.net.au **OR**
fax: (08) 8296 1731 **OR**
mail: David J Foreman & Associates, 122 Davenport Tce, Seacliff Park, SA, 5049

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ISBN 1 74096 090 4 print edition
ISBN 1 74096 091 2 web edition

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
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